

METHODOLOGICAL PLURALISM WITH REFERENCE TO RECENT LITERATURE

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ABSTRACT

The purpose of this paper is to introduce the concept of methodological pluralism and discuss its benefits and difficulties with reference to current research literature. I start my discussion with an overview of building blocks of research. I do so because all these concepts will be used throughout the paper. After this I briefly elaborate major research paradigms: positivism, interpretivism and critical realism. Then I discuss quantitative and qualitative research, their strengths and weaknesses. The purpose of this discussion is to provide background knowledge to methodological pluralism or mixed methods research (in this paper I use these two terms interchangeably). As mixed methods research is an integration of different research methods, it seems reasonable to first introduce the quantitative and qualitative research. It may also serve as a comparison to mixed methods research. After this I introduce the concept of methodological pluralism with reference to available literature. Then I analyze why pluralism is necessary and what are the strengths and weaknesses of methodological pluralism. In the end I discuss some of the difficulties of mixed methods research. Summary presents all the major points discussed in the paper with particular reference to mixed methods research.

Keywords: positivism, interpretivism, critical realism, mixed methods, methodological pluralism.

INTRODUCTION

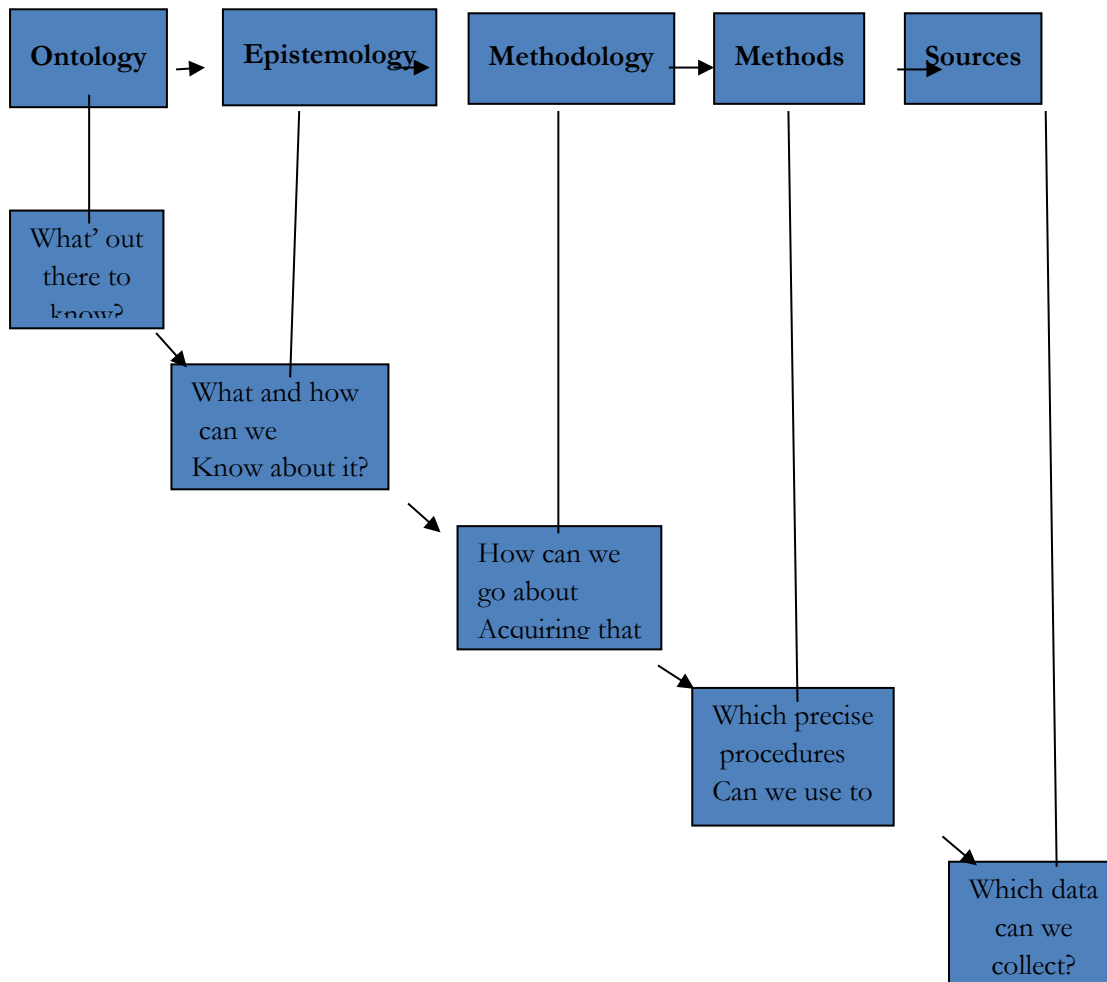
Methodological pluralism is an emerging research paradigm in educational and social research. It is also referred to as mixed methods research (in this paper I will use these two concepts interchangeably). Social research aims to find out truths and reality about certain social phenomena. There are different methods and techniques employed to explore, elaborate or explain different angles of phenomena. Before I discuss the concept of methodological pluralism it seems appropriate to understand the research paradigms. An understanding of research paradigms may lead to better discussion of mixed methods research.

All research paradigms are based on certain ontological and epistemological assumptions. By ontological assumptions, Blaikie (2000, p. 8) means 'assumptions that are made about the nature of social reality, claims about what exists, what it looks like, and what units make it up and how these units interact with each other. In short, ontological assumptions are concerned with what we believe constitutes social reality'. Ontological assumptions lead to epistemological standpoint. Blaikie (2000, p. 8) elaborates epistemological assumptions as 'the possible ways of gaining knowledge of social reality whatever it is understood to be. In short, claims about how what is assumed to exist can be known'. Ontology is concerned with the nature of reality. It tries to answer 'what is real?' whereas epistemology tries to answer 'how can we know the reality? There is a link between ontological and epistemological assumptions. Our views of reality are likely to define our epistemological standpoints.

Grix (2004) presents somewhat mechanistic interrelationship between ontology, epistemology, methodology, methods and sources. It is for the purpose of clarity which may help the researcher to understand his stance. Methodology translates the principles of a paradigm into a research language, and shows how the world can be explained, handled, approached or studied (Kaplan, 1973; Grix, 2004). Methods refer to the techniques or procedures used to generate and analyze data (Grix, 2004; Cohen, et al., 2007). Sources are the responses to the methods used in a study. These may be

responses to a questionnaire or interview transcripts. If we look at the above mentioned relationship, it seems that ontology is the starting point of research. Views about reality define epistemological assumptions and the methods to be used in the study. For instance, if we believe that reality is socially constructed by the people; it is subjective and lies in peoples'

The Interrelationship between the Building Blocks of Research



Grix (2004, p. 66)

minds, we are likely to adopt epistemological standpoint in line with our views of reality. As a researcher, we may be more inclined to use qualitative methodology in which the participants have a say in the process of data collection. My purpose of presenting the building blocks of research is that each paradigm of research has some distinct assumptions about the nature of reality and how it may be known and what types of methods may be used to find out the reality. Now I discuss major research paradigms and their assumptions about reality and purpose of research.

MAJOR RESEARCH PARADIGMS (POSITIVISM, INTERPRETIVISM AND CRITICAL REALISM)

Positivism

Positivism is a paradigm which looks upon natural science as a model for the human sciences, in the process seeking to unearth a unitary methodology of the social and natural sciences. It applies scientific method to human affairs conceived as belonging to a natural order open to objective enquiry (Mitchell, 1968; Bernard, 2000; Grix, 2004). Positicians lay more emphasis on explanation in social

research. The real purpose of explanation is prediction. (Rubinstien, 1981). The proponents of this paradigm place an emphasis on empirical theory in production of knowledge and believe that reality can be captured by our senses and they are more concerned with fact than with value (Hughes & Sharrock, 1997; Grix, 2004).

Positivist researchers generally conduct quantitative studies because these are in line with their ontological and epistemological views. They tend to be objective. Their purpose of research is to describe social life, to predict and generalize courses of events. Good evidence is based on precise observations and others can repeat it.

Interpretivism

Interpretive paradigm came as a reaction to positivism. The proponents of this paradigm criticized positivism for applying natural sciences on human beings. They hold different ontological views. This paradigm proposes that reality is socially constructed. Reality can be studied through the direct detailed observation of people in natural setting in order to arrive at understanding and interpretations of how people create and maintain their social worlds. Interpretivists see the social and natural sciences as being distinct from one another. Social phenomena do not exist independently of our interpretations of them (Grix, 2004). People actively create their social world and the social world would be studied in its natural state without manipulation by the researcher (Hammersley and Atkinson, 1983).

Interpretive viewpoint about reality, human beings and purpose of research is different, rather opposite to positivism. Human beings hold central place and they are the creators of their own world. Researchers tend to understand and interpret social life as viewed by the people themselves. Good evidence is embedded in the context of social interactions.

Critical Realism

Critical realist scholars have attempted to combine some standpoints of positivism and interpretivism (May, 2001). Social sciences can use the same methods as natural science regarding causal explanations (as in positivism) and moves away from them by adopting an interpretive understanding (Sayer, 2000). Critical realists not only tend to understand but also explain the social world (Grix, 2004). Robson (2002) argues that critical realism is 'critical in the sense that it provides a rationale for a critical social science; one that criticizes the social practices that it studies... hence adopting a critical realist stance not only provides a third way between positivism and interpretivism, but might help fulfill the emancipator potential of social research.' It can be argued that critical realists may help people change conditions and build a better world for themselves.

From the above discussion it may be concluded that all three paradigms have varying views about reality and how it may be explored. They have different standpoints regarding the purposes of social research. For positivists, the purpose of research is to describe and to predict, for interpretivists it is to understand and interpret social life as viewed by the people themselves. Critical realists seem to go beyond. For them the purpose of research seems to explain and change the social world. In the next section I discuss quantitative and qualitative research because mixed methods research is a combination of quantitative and qualitative methods. Hence it is important to discuss these first.

QUANTITATIVE AND QUALITATIVE RESEARCH

Quantitative methods are generally based on positivist paradigm and qualitative methods are based on interpretive paradigm. Blaxter (1997) is of the view that research methods associated with quantitative research are questionnaire or survey technique, structured observation with predetermined schedule and content analysis (predetermined categories). Examples of methods associated with qualitative research are interview or oral history, observation (participant or non-participant) and documentary analysis. Both types of research have their own strengths and weaknesses.

Strengths and Weaknesses of Quantitative Research

Johnson and Onwuegbuzie (2004) enlist the following strengths and weakness of quantitative research:

Strengths

- Testing and validating already constructed theories about how (and to a lesser degree, why) phenomena occur.
- Testing hypotheses that are constructed before the data are collected. Can generalize research findings when the data are based on random samples of sufficient size.
- Can generalize a research finding when it has been replicated on many different populations and subpopulations.
- Useful for obtaining data that allow quantitative predictions to be made.
- The researcher may construct a situation that eliminates the confounding influence of many variables, allowing one to more credibly assess *cause-and effect* relationships.
- Data collection using some quantitative methods is relatively quick (e.g., telephone interviews).
- Provides precise, quantitative, numerical data.
- Data analysis is relatively less time consuming (using statistical software).
- The research results are relatively independent of the researcher (e.g., effect size, statistical significance).
- It may have higher credibility with many people in power (e.g., administrators, politicians, people who fund programs).
- It is useful for studying large numbers of people.

Weaknesses

- The researcher's categories that are used may not reflect local constituencies' understandings.
- The researcher's theories that are used may not reflect local constituencies' understandings.
- The researcher may miss out on phenomena occurring because of the focus on theory or hypothesis *testing* rather than on theory or hypothesis *generation* (called the *confirmation bias*).
- Knowledge produced may be too abstract and general for direct application to specific local situations, contexts, and individuals.

(Taken from Johnson and Onwuegbuzie, 2004, p. 19)

These weaknesses seem to be consistent with the ontological and epistemological viewpoints of positivist paradigm. If methodology (selection of methods to be used in the study) is based on certain assumptions about knowledge of reality, it may limit the scope of investigation. These weaknesses are likely to remain in the study until and unless some other methods are chosen and used to get a better picture of the phenomenon under study.

Strengths and Weaknesses of Qualitative Research

Qualitative methods are generally based on interpretive paradigm. Positivism and interpretivism have fairly different viewpoints about the nature of social reality and knowledge of reality. Qualitative research has different types of strengths and weaknesses as comparative to quantitative research. I would again like to quote Johnson and Onwuegbuzie (2004) who present the following strengths and weaknesses of qualitative research:

Strengths

- The data are based on the participants' own categories of meaning.

- It is useful for studying a limited number of cases in depth.
- It is useful for describing complex phenomena.
- Provides individual case information.
- Can conduct cross-case comparisons and analysis.
- Provides understanding and description of people's personal experiences of phenomena (i.e., the "emic" or insider's viewpoint).
- Can describe, in rich detail, phenomena as they are situated and embedded in local contexts.
- The researcher identifies contextual and setting factors as they relate to the phenomenon of interest.
- The researcher can study dynamic processes (i.e., documenting sequential patterns and change).
- The researcher can use the primarily qualitative method of "grounded theory" to generate inductively a tentative but explanatory theory about a phenomenon.
- Can determine how participants interpret "constructs" (e.g., self-esteem, IQ).
- Data are usually collected in naturalistic settings in qualitative research.
- Qualitative approaches are responsive to local situations, conditions, and stakeholders' needs.
- Qualitative researchers are responsive to changes that occur during the conduct of a study (especially during extended fieldwork) and may shift the focus of their studies as a result.
- Qualitative data in the words and categories of participants lend themselves to exploring how and why phenomena occur.
- One can use an important case to demonstrate vividly a phenomenon to the readers of a report.
- Determine *idiographic* causation (i.e., determination of causes of a particular event).

Weaknesses

- Knowledge produced may not generalize to other people or other settings (i.e., findings may be unique to the relatively few people included in the research study).
- It is difficult to make quantitative predictions.
- It is more difficult to test hypotheses and theories.
- It may have lower credibility with some administrators and commissioners of programs.
- It generally takes more time to collect the data when compared to quantitative research.
- Data analysis is often time consuming.
- The results are more easily influenced by the researcher's personal biases and idiosyncrasies.

(Taken from Johnson and Onwuegbuzie, 2004, p. 19)

An analysis of weaknesses and strengths of quantitative and qualitative research indicates that strengths of quantitative research are, in fact, weaknesses of qualitative research and the vice versa. Similarly weaknesses of one type of research methods are strengths of the other type of research. It can be argued that if we adopt a purist approach to follow the paradigms and the relevant research methods, then the weaknesses are always likely to remain in both types of studies. As the purpose of all social research (without any doubt may be) is to get a valid and reliable understanding of the social world, is it reasonable to go along all the weakness which, I would say, seem to be inherent in two types of methodologies? If we continue to follow the rigid approach, we are likely to decrease the degree of validity and reliability of the process and product of research. This situation paves the way for a type of research which has fairly limited weaknesses and more strengths. It has led the researchers to seriously think about mixed methods research or methodological pluralism. Now I will discuss the concept of methodological pluralism.

METHODOLOGICAL PLURALISM

Creswell (2003, P. 165) attempts to define a mixed methods study as 'the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently

or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research'. Johnson and Onwuegbuzie (2004) also present a similar definition: 'mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study'. This definition goes beyond quantitative and qualitative data or methods or techniques. Johnson also includes approaches, concepts and the language of research. If we use the word 'approach' in the meaning of paradigm or philosophical stance, then it seems that Johnson is arguing for mixing the paradigms. However further evidence is needed to draw such point. Grix (2004) argues that methods should be viewed as mere tools for data collection and they should not be looked upon as being rooted in epistemological and ontological assumptions.

However, both these definitions focus two major points: collection and/or analysis of quantitative and qualitative methods and the integration of the data. The concept of integration is important in mixed methods research. I will discuss it later in this paper. The question here is why to use more than one method in the same study? If the interrelationship between ontology, epistemology and methodology, I discussed earlier is taken as rigorous and rigid, then there is limited scope for mixed methods research. Greene and McClintock (1985) suggest that 'any effort to compare or integrate findings from different methods requires the prior adoption of one paradigm or the other, even when . . . the methods themselves are linked to and implemented within alternative paradigms'.

Similarly, Bednarz (1985: PP. 289- 90) argues that there is reason to believe that qualitative and quantitative approaches cannot be synthesized because they occupy alternative - rather than complementary - philosophical spaces. . . . Any synthesis must necessarily adopt the perspective of one or the other, so that any effort to reach a middle ground does so only in terms of a single perspective.' Again Bednarz (1985: P. 304) asserts that cross philosophy triangulation is not possible because of the necessity of subsuming one approach to another. . . . Nor can the researcher pick one aspect of an approach and one from another without making explicitly or implicitly commitments regarding these matters'. Silverman (1993) notices that quantitative and qualitative methodologies are distinct and incompatible.

The main argument in the above cited literature is that quantitative and qualitative methodologies are, in fact, opposite to each other. Both are based on contradictory paradigms. Their views about reality, methodology, human beings, and the purpose of research are different. The researcher is likely to be a member of one academic community at a time. For instance, if he believes that reality is socially constructed, then how can he believe at the same time that it is objective and 'out there' to know? Hence, the integration of methods from two competing approaches does not seem to be a reasonable idea. However, more than one methods of the same approach or same paradigm may be used in a single study.

Keeping in view the above mentioned arguments, what is the need to use mixed methods research? Proponents of mixed methods research also present forceful arguments in favour of integrating methods from different approaches. Caracelli and Greene (1997) argue that the differences between quantitative and qualitative methodology are artificial. Moran et al. (2006) suggest that methodological pluralism can be used to understand the different aspect of the social phenomena and to get a thick description of the social world. However he cautions to consider the pragmatic and epistemological implications of how those methods are to be brought into relationship with each other in a particular study.

The arguments for and against mixed methods indicate that the problem is not in the use of mixed methods, but how they are used in a study. The criticism raised by various writers is primarily based on the assumption that it is not reasonable to integrate two competing methods or paradigms. They view no problem, however, if methods are not contradictory to the ontological standpoint. But what if two competing methods are used in the same study if they enhance understanding of the phenomenon? I will try to answer this question in the next part.

Why Methodological Pluralism?

One of the ways to assert the significance of methodological pluralism is to discuss how mixed methods can be useful in a study to give us a better and whole picture of the social world. Morse & Chung (2003) argue that adding data collection strategies clearly increases the scope of the project. For instance including observational data in the grounded theory project or additional data sources to the ethnography may overcome the limitations afforded by a single method. Combining qualitative and quantitative methods provides a more balanced perspective, moving toward holism. Grant (2009) elaborates the benefits of mixed methods in the field of cognitive behaviour psychotherapy. He suggests:

Critically evaluative and pluralistic stance would arguably distinguish senior practitioners in terms of them being able to make broad rather than narrow appraisals of the evidence base for their practice. Recognition of the relevance of paradigmatic and epistemological pluralism in cognitive behavioural work would, it is argued, confer considerable advantages on our practice communities and clients (Grant, 2009: P. 368).

Grant considers single method of data collection as 'narrow appraisal' and multiple methods as 'broad' view of the picture. Davis (2009) presents an interesting view from humanistic and transpersonal psychology. He says that there are psychological states such as self-actualization, love, happiness, meaning, authenticity, spirituality etc. which are unlikely to be approached and studied with a single method. He says that studying such phenomenon would be impossible from only quantitative methods. And if quantification is totally ignored, even then our understanding would be limited. If such studies include both quantitative and qualitative strategies, we have more chances of revealing their deep structure and characteristics, consequences and other experiences. He concludes:

Methodological pluralism is an appropriate basis for the study of human behaviour and experience. Being open to the full range of human experience, combining quantitative and qualitative research methods, valuing phenomenological reports as a key source of data, and providing systematic means to evaluate the adequacy, truth-value, consistency, and neutrality of research, a complementary, integrated approach provides scientific access to studying those psychological dimensions of special interest to humanistic and transpersonal psychology. Methodological pluralism avoids the limitations of a narrow scientism with its exclusionary dependence on natural science methods, yet it furthers the basic goals and values of science (Davis, 2009: P. 21).

Davis' arguments show that there are some types of social phenomena which may be studied better through pluralism. We may find similar situations in the field of education. That is one of the reasons why mixed methods research is being popular and researcher tend to accept pluralism as an advantage over 'purist' standpoint.

Shih (1998) notes that combining research methods is important to increase the validity of data. Freshwater (2007) also argues that 'perhaps it is important to cross-validate results, but I believe that the rationale and significance of cross-validation is highly dependent on the motivation for research (which is rarely discussed) and the energy moving the desire for accuracy'. Yes, of course, motivation is necessary but I think it is required for the whole research process, not only for using mixed methods. Cherryholmes (1992) is of the view that researchers need to find out the practical solutions of the problems. Hence, the use of both quantitative and qualitative methods is a way to best understand research problems.

The above discussion reveals that methodological pluralism can be productively used in understanding people's experiences about abstract phenomenon. It may be used in a variety of contexts and in a variety of disciplines. It makes for a strong case for popularity of mixed methods research in future. Now I will discuss the strengths and weaknesses of mixed methods research.

Strengths and Weaknesses of Mixed Methods Research

Johnson and Onwuegbuzie (2004), strong proponents of mixed research, present the following strengths and weaknesses of mixed methods research.

Strengths

- Words, pictures, and narrative can be used to add meaning to numbers.
- Numbers can be used to add precision to words, pictures, and narrative.
- Can provide quantitative and qualitative research strengths [mentioned above].
- Researcher can generate and test a grounded theory.
- Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach.
- The specific mixed *research designs* discussed in this article have specific strengths and weaknesses that should be considered (e.g., in a two-stage sequential design, the Stage 1 results can be used to develop and inform the purpose and design of the Stage 2 component).
- A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study.
- Can provide stronger evidence for a conclusion through convergence and corroboration of findings.
- Can add insights and understanding that might be missed when only a single method is used.
- Can be used to increase the generalizability of the results.
- Qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice.

Weaknesses

- Can be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently; it may require a research team.
- Researcher has to learn about multiple methods and approaches and understand how to mix them appropriately.
- Methodological purists contend that one should always work within either a qualitative or a quantitative paradigm.
- More expensive.
- More time consuming.
- Some of the details of mixed research remain to be worked out fully by research methodologists (e.g., problems of paradigm)

(Taken from Johnson and Onwuegbuzie, 2004: P. 21)

If we analyse the strengths and weaknesses of mixed methods research, it is clear to us that this type of research has all the strengths of quantitative and qualitative research. Interestingly, the weaknesses are not those types of weaknesses which cannot be minimized. All the weaknesses are concerned with time, resources and training etc. These weaknesses are not big ones as compared to quantitative and qualitative methods. These may be overcome by the researchers or the organization which is conducting the research.

Jick (1979) says that the use of multiple methods can minimize some of the disadvantages of qualitative and quantitative methods. Greene & Caracelli (1997) argue that mixing different types of methods can strengthen a study. In my view it has more advantages than disadvantages. The disadvantages seem to be of strategic nature. The greatest weakness may be the tension between the paradigms. It may be difficult for researchers (particularly who hold rigorous philosophical standpoints) to accept methods from competing paradigms. There seems to be a consensus among a number of considerable writers to use multiple methods in a single study. These methods may be from

the same paradigm or from the other paradigms. But still there is an ambiguity regarding mixing of paradigms. Although the concept of 'pragmatism' is supported by various writers (see Morse & Chung, 2003; Johnson, 2004; Moren, 2006; Grant, 2009; Davis, 2009), the debate is still going on whether it is reasonable to mix paradigms or not. The choice of paradigm depends on a number of factor like the like the nature of subject, the research purpose, the context etc. (Siddiqui, 2007). In my point of view, it depends upon the research questions and, of course, the researcher himself which stance he takes. The 'eclectic' and 'pragmatic' approach seems to be the emerging standpoint in social research. In the next part I will discuss some difficulties of methodological pluralism.

DIFFICULTIES OF METHODOLOGICAL PLURALISM

In this part I focus on some of the difficulties of methodological pluralism which are consistently found in literature on this topic. The most significant and perhaps the most cited difficulty is the integration of qualitative and quantitative methods (Creswall et al., 2003; Moran et. Al., 2006; Bryman, 2007; Johnson, et al., 2007; Freshwater, 2007; Davis, 2009). Creswall et al., 2003 define integration as the 'combination of quantitative and qualitative research within a given stage of inquiry'. Coxon (2005) argues that methods need to be integrated from the beginning of the research toward the process of data collection and analysis. He criticises those studies which produce more and more data but are not concerned with the analytical combination of the data. Barker (2005) comments that pluralism can occur in an integrative way in a study. Bryman (2007) reports that lack of integration in mixed research is a major hindrance in the development of mixed methods research. Quantitative and qualitative findings are either not integrated or integrated to only a limited extent. He conducted interviews from 20 social researchers in the UK identified nine types of barriers to integration of multiple methods. I briefly elaborate each of these. It is worth mentioning that these difficulties are, in fact, the basic problem with the mixed methods research. These are concerned with the fundamental philosophy or grounding of mixed research. As we know that the grounding assumption of mixed methods research is to combine or integrate different research methods. And if there is some problem in integration itself, then its whole grounding may be criticized.

Different Audiences

The varying interests of the audience affect the integration. Expectations of audiences may cause mixed methods researchers to make only minimum use of one set of findings and emphasizing the other set. Commenting on this perspective, one of the respondents says:

I have found that if I do both I will be listened to by a wider audience but there are audiences who only want to hear about my survey findings and regard the rest as fluff. And I can speak to those audiences and there are others who want to hear about, you know, the in depth contextualized feel of everyday life and they stop listening if I tell them about my survey (Byrman, 2007: p. 11).

Methodological Preferences

One interviewee explains:

I—ultimately I don't really use the quantitative material for much more than I've just described. I put my faith—I mean essentially I suppose, I'm a skeptic on questionnaire-based materials. I do it for various reasons but I'm not expecting the stuff to give me more than hints and also to give me the sense of as I've said, the breadth of what's there. I put—I actually use—what I call data is the qualitative material, that's what I think of as data and that's what I think of as stuff that I've got into in sufficient depth, that I feel comfortable that I could talk on the basis of that material. So the quantitative is background; it's not actually data. (Byrman, 2007: p. 13).

Some researchers focus more on one set of findings because they are more interested in one particular approach. They are likely to miss the other approach.

Structure of Research Projects

Sometimes the research project may be set up in such a way that the mixed methods researcher may feel difficulty to integrate the different methods.

If you start from a quantitative position, or methodology, it's actually very difficult to then add the qualitative in, because—and I—what I came away feeling was that actually what's the key thing? It's the level of structure that you're using, at the outset, how far you can leave that open till further down the line really. And if you're going to do something—if you set something up in a quantitative way, the chances are you're going to set it up in a structured way and if you do that then you're building an assumptions-sort of agenda (A respondent in (Byrman, 2007: p. 14).

Role of Timelines

Sometimes the quantitative and qualitative components may get out of phase with each other. Data collection through one method may be delayed. This delay may cause poor integration.

Skill Specialisms

The researchers may have specialization in either quantitative or qualitative tradition. They need to combine these skills together. However, Byrman says that the presence of skill specialisms may lead to compartmentalization of roles and responsibilities that can hinder the integration of findings.

Nature of the Data

Researchers may feel that one set of data is more striking than the other set, depending on their methodological backgrounds.

Bridging Ontological Divides

As I have earlier discussed that it may be difficult to combine two diverse paradigms. Byrman says that there may not be so much a clash in epistemological and ontological positions as a practical difficulty to integrate the two together.

Publication Issues

Sometimes publication issues may hinder integration. Some journals may emphasize either quantitative or qualitative research because they tend to want either quantitative or qualitative evidence to be highlighted.

Problem of Exemplars

All the participants struggled to nominate an exemplary study with mixed methods design. One respondent says: 'Hmm, that's tricky. I think it's difficult to answer that question. I don't think I'd—I'd find it difficult to find an exemplar' (Byrman, 2007: P. 19).

My purpose of giving a brief description of the above mentioned barriers was to elaborate that these are not merely barriers to integration. These difficulties may be seen as common difficulties faced by mixed methods researchers. The difficulties indicated above may be observed in the process of data collection and analysis. If both quantitative and qualitative data are gathered simultaneously, it may be easy to code and analyse and finally easy to integrate. Methodological divide may develop a sort of tension constantly going on in the researcher's mind, particularly if two competing paradigms are integrated. But if these difficulties are not overcome, then what is the use of mixed methods? For instance, if a researcher ignores some of data, then it seems that there is no point in combining the methods. But if these difficulties are not overcome, then what is the use of mixed methods? For

instance, if a researcher ignores some of data, then it seems that there is no point in combining the methods. However, I assume that with the passage of time and with the increase in mixed methods studies, the researchers may be able to tackle such difficulties in a better way. Moreover, the increase in mixed methods literature may provide a clear direction to the researchers. Exemplary studies using methodological pluralism may serve as baseline studies for further research in future.

CONCLUSION

I started my discussion from the building blocks of research. Grix (2004) gave a mechanistic interrelationship between ontology, epistemology, methodology, methods and sources. I do not mean that this this relationship is always consistent with ontological assumption. It was just for understanding the complexity of how paradigms are established. Positivism looks upon natural sciences as a model to study human beings. Interpretivism came as a criticism of positivism. Both these paradigms hold differing views about the nature of reality and how it can be explored. The discussions of paradigms and quantitative and qualitative approaches presented a background and comparison to discuss methodological pluralism or mixed methods research.

Both quantitative and qualitative researches have strengths and weaknesses. Because these are two competing approaches, the strengths of one type of research are the weaknesses of the other methodology. An alternative viewpoint which is typically based on pragmatic approach emerged as a result to minimize the weaknesses in the social research methods. This is called methodological pluralism or mixed methods research. The main feature of this research is to use and integrate multi methods approach to get a holistic and deeper understanding of the social world. It uses both quantitative and qualitative methods for data collection and analysis. There is a consensus among majority of writers that methods of different research approaches or paradigms may be integrated to have a holistic view of the social reality. However, some writers are cautious about this integration particularly if the integration is across paradigm. Mixed methods research has all the strengths of quantitative and qualitative methods. When different methods are combined together, they are likely to increase validity of research findings.

However, the methodological pluralist viewpoint has posed some difficulties for the researchers. Evidence shows that one of the biggest difficulties is that of integrating quantitative and qualitative methods. Researchers face difficulties of integration during data collection, data analysis and the write up report. The other major difficulty is tension between ontological and epistemological assumptions while using methods from two different approaches. It is more likely that researchers may follow one paradigm at a time. An attempt to mix viewpoints of two opposing approaches may lead to confusions.

Based on the literature cited in this paper, I may conclude that mixed methods research is an emerging methodology in social science research. The researchers want to address understand and solve their practical problems through this approach. The knowledge in this methodology is growing with the passage of time. It is likely that this research may become an alternative, pragmatic paradigm along with positivism and interpretivism but the problem of integration of methods need to be addressed.

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